

**Mississippi State University**  
**Notice of Proposed Sole Source Purchase**  
**245-108**

Mississippi State University anticipates purchasing the item(s) listed below as a sole source purchase. Anyone objecting to this purchase shall follow the procedures outlined below.

**1. Commodity or commodities to be purchased (make, model, description):**

COSMED QUARK RMR & QUARK CPET is an indirect calorimeter specifically designed for the measurement of resting energy expenditure.

Includes the following for canopy testing:

- canopy hood kit (L)
- canopy adapter - 18mm flowmeter
- disposable veils (50)
- white Ab filters (50)
- sampling line

Includes the following for exercise & RMR mask testing:

- Opto-Reader (1 pc)
- T3 turbine (2 pcs)
- sampling line (2 pcs)
- white Ab filters (50) with adapter
- standard masks with mask adapters (3 pcs XS, S, M) - headgear (1 pc S/M, 1 pc Petite/XS)

Additional items included:

- Quark T12x ECG starter kit (ECG device w/ software, electrodes (250), skin gel)
- rubber mouthpieces for mouthpiece testing (requires filter & nose clips)
- CAL gas with regulator
- 3L calibration syringe with adapter & tube
- HR monitor (receiver and transmitter)
- power supply cable & USB cable
- OMNIA software & user manual

**2. Explanation of the need to be fulfilled by this item(s), how is it unique from all other options, and why it is the only one that can meet the specific needs of the department:**

COSMED is the manufacturer and only distributor of the COSMED QUARK RMR & QUARK CPET Unit. The COSMED QUARK RMR & QUARK CPET is widely recognized as a **gold standard device for assessing resting energy expenditure, with multiple peer-reviewed studies supporting its accuracy and reliability.** Accuracy and performance have been validated against the Douglas Bag "Gold Standard" and utilized in major scientific publications. The COSMED QUARK RMR & QUARK

CPET fulfills a critical need within our department by providing precise, evidence-based metabolic measurements essential for both research and teaching. It enables accurate assessment of energy expenditure during rest and exercise conditions in a wide range of populations, including healthy individuals and clinical populations, making it highly relevant for kinesiology. Its intuitive user interface, and minimal calibration requirements make it uniquely suited for use in student-led research, laboratory instruction, and faculty-driven studies. This system offers a combination of clinical-grade accuracy, academic versatility, and operational simplicity. Furthermore, the device's software is compatible with the department's existing data analysis tools, allowing for efficient data transfer, analysis, and storage. This equipment is needed for us to be comparable to other kinesiology research programs nationally and internationally in methodology for scientific publications.

**3. Name of company/individual selling the item and why that source is the only possible source that can provide the required item(s):**

COSMED; This is the only manufacturer and distributor of this equipment

**4. Estimated cost of item(s) and an explanation why the amount to be expended is considered reasonable:**

72199.40

Metabolic analysis devices are costly due to the sensitivity and precision that provide. The methods by which these devices work require very tight tolerances and manufacturing processes.

**5. Explanation of the efforts taken by the department to determine this is the only source and the efforts used to obtain the best possible price:**

COSMED USA, Inc. is the sole manufacturer and distributor of the **COSMED QUARK RMR & QUARK CPET** Unit. Efforts have been made to obtain the best possible price through the following steps:

Internet and Research Searches: The department has searched the internet and scientific journals for resting energy expenditure analysis devices. The **COSMED QUARK RMR & QUARK CPET** is very commonly used for metabolic analysis and supported by experts in exercise physiology, sports nutrition, and metabolic research.

Currently owned equipment: The department currently owns other COSMED devices and related equipment.

Vendor Communication: The department confirmed with COSMED USA, Inc., the sole manufacturer and distributor of the **COSMED Q-NRG** Unit, that this is the most recent and advanced model available.

Price Negotiation: Efforts are being made to purchase a **COSMED QUARK RMR & QUARK CPET**, with the department receiving improved pricing due to other purchases from COSMED and continued efforts to build our inventory of compatible equipment.

The decision to proceed with a sole source purchase from COSMED USA, Inc. is based on their status as the only provider of the **COSMED QUARK RMR & QUARK CPET** Unit. This equipment is needed for us to be comparable to other kinesiology research programs nationally and internationally in methodology for scientific publications.

Any person or entity that objects and proposes that the commodity listed is not sole source and can be provided by another person or entity shall submit a written notice to:

Jennifer Mayfield, CPPO  
Director of Procurement & Contracts  
[jmayfield@procurement.msstate.edu](mailto:jmayfield@procurement.msstate.edu)  
Subject Line must read "Sole Source Objection"

The notice shall contain a detailed explanation of why the commodity is not a sole source procurement. Appropriate documentation shall also be submitted if applicable.

If after a review of the submitted notice and documents, MSU determines that the commodity in the proposed sole source request can be provided by another person or entity, then MSU will withdraw the sole source request publication from the procurement portal website and submit the procurement of the commodity to an advertised competitive bid or selection process.

If MSU determines after review that there is only one (1) source for the required commodity, then MSU will appeal to the Public Procurement Review Board. MSU will have the burden of proving that the commodity is only provided by one (1) source.